

 <p><b>Financial Assistance Award</b></p> <p><b>DENALI COMMISSION</b>          510 L Street, Suite 410          Anchorage, Alaska 99501          (907) 271-1414 (phone)          (907) 271-1415 (fax)          www.denali.gov</p>		<b>Award Number</b>	01507-02																																																																													
		<b>Award Title</b>	Mertarvik Energy Planning and Design																																																																													
		<b>Performance Period</b>	October 15, 2016 through December 31, 2018																																																																													
<b>Authority</b> 112 Stat 1854	<b>CFDA Number</b> 90.100	<b><u>Recipient Organization &amp; Address</u></b> Alaska Energy Authority 813 W Northern Lights Blvd Alaska Energy Authority  <b>Phone:</b> 907-771-3000 <b>Recipient DUNS #</b> 054072608 <b>TIN #</b> 926001185																																																																														
<b>Denali Commission Finance Officer Certification</b>																																																																																
<b><u>Cost Share Distribution Table</u></b> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Accounting Code</th> <th colspan="2">New Funding</th> <th colspan="2">Prior Period Funding</th> <th rowspan="2">Total</th> </tr> <tr> <th>Denali Commission</th> <th>Other Contributors</th> <th>Denali Commission</th> <th>Other Contributors</th> </tr> </thead> <tbody> <tr> <td>95670000</td> <td>\$129,000.00</td> <td></td> <td>\$700,000.00</td> <td></td> <td>\$829,000.00</td> </tr> <tr><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td></td><td>\$0.00</td></tr> <tr><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td></td><td>\$0.00</td></tr> <tr><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td></td><td>\$0.00</td></tr> <tr><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td></td><td>\$0.00</td></tr> <tr><td></td><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td>\$0.00</td></tr> <tr><td></td><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td>\$0.00</td></tr> <tr><td></td><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td>\$0.00</td></tr> <tr><td></td><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td>\$0.00</td></tr> <tr><td></td><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td>\$0.00</td></tr> <tr> <td><b>Total</b></td> <td><b>\$129,000.00</b></td> <td><b>\$0.00</b></td> <td><b>\$700,000.00</b></td> <td><b>\$0.00</b></td> <td><b>\$829,000.00</b></td> </tr> </tbody> </table>					Accounting Code	New Funding		Prior Period Funding		Total	Denali Commission	Other Contributors	Denali Commission	Other Contributors	95670000	\$129,000.00		\$700,000.00		\$829,000.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00	<b>Total</b>	<b>\$129,000.00</b>	<b>\$0.00</b>	<b>\$700,000.00</b>	<b>\$0.00</b>	<b>\$829,000.00</b>
Accounting Code	New Funding		Prior Period Funding			Total																																																																										
	Denali Commission	Other Contributors	Denali Commission	Other Contributors																																																																												
95670000	\$129,000.00		\$700,000.00		\$829,000.00																																																																											
	\$0.00		\$0.00		\$0.00																																																																											
	\$0.00		\$0.00		\$0.00																																																																											
	\$0.00		\$0.00		\$0.00																																																																											
	\$0.00		\$0.00		\$0.00																																																																											
		\$0.00		\$0.00	\$0.00																																																																											
		\$0.00		\$0.00	\$0.00																																																																											
		\$0.00		\$0.00	\$0.00																																																																											
		\$0.00		\$0.00	\$0.00																																																																											
		\$0.00		\$0.00	\$0.00																																																																											
<b>Total</b>	<b>\$129,000.00</b>	<b>\$0.00</b>	<b>\$700,000.00</b>	<b>\$0.00</b>	<b>\$829,000.00</b>																																																																											
This Financial Assistance Award approved by the Federal Co-Chair of the Denali Commission constitutes an obligation of federal funding.																																																																																
<b>Signature of Authorized Official - Denali Commission</b>  Electronically Signed		<b>Typed Name and Title</b> Mr. Jay Farmwald Director of Programs		<b>Date</b>  11/03/2017																																																																												

# AWARD ATTACHMENTS

Alaska Energy Authority

01507-02

1. Terms and Conditions
2. Attachment A-1

***Financial Assistance Award 1507***  
***Between the Denali Commission and Alaska Energy Authority (AEA)***  
***For Mertarvik Energy Planning and Design***  
***Amendment 2***  
***13 October 2017***

All changes to the award conditions are noted below.

1. Scope: Add the following item to the scope of work.
  - Provide the design of a temporary power plant for early phases of Mertarvik development.
2. Budget:
  - Increase funding by \$129,000 for the above scope of work.
3. Performance Period:
  - Revise performance period end date to 31 December 2018.

More detailed information related to the scope of work, budget, deliverables, and schedule are included in Attachment A-1 dated 13 October 2017.

There are no other changes to the existing Financial Assistance Award.

***Financial Assistance Award 1507  
Between the Denali Commission and Alaska Energy Authority (AEA)  
For Mertarvik Energy Planning and Design  
Amendment 2 – Attachment A-1  
13 October 2017***

**Scope of Work**

*Temporary Power Plant Design:* The Newtok Village Council (NVC) is pursuing the completion of Mertarvik development activities that would support 35 – 50 full time residents beginning in the fall of 2018. Reliable power generation facilities will be required by October 2018 to meet this goal.

The original Award 1507 and Amendment 1 provided for the development of an Energy Master Plan and the subsequent design of bulk fuel and power facilities according to the master plan. The Energy Master Plan has been completed and the bulk fuel and power plant designs are progressing from 35% completion toward final construction documents.

Recent efforts to obtain full funding for the construction of a permanent power generation facility were unsuccessful. Available funding is not sufficient to construct the facility envisioned in the original scope of work. A temporary power plant will be needed to provide power for the initial phases of Mertarvik development and until sufficient funding is available to construct permanent facilities.

The scope of amendment 2 includes the design of a temporary power facility, comprising the following tasks:

- Develop a design memorandum evaluating generator size, recovered heat potential, distribution layout and voltage requirements.
- Provide design plans for a two-generator module set up for prime power operation. The “connex-style” module will be equipped with all required support systems including generation controls, station service power, engineered exhaust, fuel oil piping, cooling system, and ventilation. The temporary plant will be located on a gravel pad adjacent to the existing man-camp emergency generator and will be installed on a temporary foundation consisting of sleepers. The design shall be consistent with a total construction phase budget of \$1,000,000. The construction phase budget includes all labor, materials and equipment to construct, ship and place the module, plus all AEA project management and HDL construction administration services.
- Provide design plans for fuel supply piping or fuel delivery to the day tank inside the generator module from an existing 5,000-gallon double-wall diesel fuel tank currently used to supply the mancamp construction generator.

- Develop an application to the Regulatory Commission of Alaska to either expand the existing Certificate of Public Convenience and Necessity (CPC&N) held by Ungusraq Power Company or for a new CPC&N for Mertarvik.
- Provide design plans for a limited electrical distribution, either overhead or below grade, to provide power to the mancamp, MEC, and up to 7 houses.

This new scope of work is in addition to the existing scope to design a permanent power house for Mertarvik. The existing scope of work is unchanged by this amendment.

### **Deliverables**

- Design Memorandum
- 65% Design and Construction Cost Estimate
- Final Design and Construction Cost Estimate
- Bid ready project manual
- Submitted CPC&N application

### **Budget**

The Commission is making an additional \$129,000 available to AEA to expand the scope of work in accordance with this amendment.

Budget detail is provided in the summary table on page 3 of this attachment.

### **Delivery Method**

The delivery method is unchanged by this amendment.

### **Schedule**

Milestone delivery dates for the temporary power plant design are as follows:

Design Memorandum	20 November 2017
65% Design and Construction Cost Estimate	8 January 2018
Project Manual and Construction Cost Estimate	12 February 2018
CPC&N Application	12 February 2018

Milestone deliverables for the original scope of work are amended as follows:

65% Design: Permanent Power and Bulk Fuel	31 August 2018
Final Design: Permanent Power and Bulk Fuel	30 November 2018
Project Closeout	31 December 2018

<b>BUDGET SUMMARY</b>						
<i>Line</i>	<b>Item/Activity</b>	<b>Delivery Method</b>	<b>Budget</b>	<b>Award 1507 through Amend. 1</b>	<b>Amend 2 (This Action)</b>	<b>Notes (Pertaining to Amendment 2)</b>
1	<b>Project Management</b>					
2	Project Manager	AEA	\$ 73,128	\$ 65,000	\$ 8,128	4 hours / week x 16 weeks x \$127 / hour
3	<b>Planning and Design</b>					
4	Energy Master Plan Development Allowance	AE Contract	\$ 100,000	\$ 100,000		
5	Permanent Power Plant Design Allowance	AE Contract	\$ 250,000	\$ 250,000		
6	Permanent Bulk Fuel Farm Design Allowance	AE Contract	\$ 270,000	\$ 270,000		
7	Temporary Power Module Design Allowance	AE Contract	\$ 117,601		\$ 117,601	Estimate provide by HDL dated 13 October 2017
8	<b>Indirect Costs</b>					
9	10% Indirect Cost <sup>1</sup>		\$ 17,313	\$ 14,000	\$ 3,313	Applied to line 2 and first \$25,000 of line 7
10	<b>Subtotal</b>		<b>\$ 828,042</b>	<b>\$ 699,000</b>	<b>\$ 129,042</b>	
11	<b>Total Project Budget (Rounded)</b>		<b>\$ 829,000</b>	<b>\$ 700,000</b>	<b>\$ 129,000</b>	

<b>FUNDING SUMMARY</b>			
12	<b>Original FAA Award</b>	<b>\$ 379,430</b>	
13	<b>Amendment Number 1</b>	<b>\$ 320,570</b>	
14	<b>Amendment Number 2</b>	<b>\$ 129,000</b>	This action.
15	<b>TOTAL AWARD TO DATE</b>	<b>\$ 829,000</b>	

**Notes**

1. The Alaska Energy Authority (AEA) does not have a negotiated indirect cost rate; use the 10% de-minimis rate in 2 CFR 200.414